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Dated: March 14, 2008

Signature: _____

(Lorraine Davidoff)

Docket No.: 64032/P015US/10404210
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Sammy M. Chau et al.

Application No.: 10/825,089

Confirmation No.: 7160

Filed: April 15, 2004

Art Unit: 2617

For: INTELLIGENT WIRELESS SWITCH (IWS)
AND INTELLIGENT RADIO COVERAGE
(IRC) FOR MOBILE APPLICATIONS

Examiner: M. G. Manoharan

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under 37 C.F.R. § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on January 14, 2008, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. § 41.20(b)(2) will be paid online by credit card.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

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|-------|---|
| I. | Real Party In Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |
| VI. | Grounds of Rejection to be Reviewed on Appeal |
| VII. | Argument |
| VIII. | Claims Appendix |

- IX. Evidence Appendix
- X. Related Proceedings Appendix

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Hong Kong Applied Science and Technology Research Institute Co. Ltd.
18/F, Tower 6 Gateway,
9 Canton Road,
Tsimshatsui, Kowloon,
Hong Kong, China.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 18 claims pending in application.

B. Current Status of Claims

1. Claims canceled: none;
2. Claims withdrawn from consideration but not canceled: none;
3. Claims pending: 1-18;
4. Claims allowed: none; and
5. Claims rejected: 1-18.

C. Claims On Appeal

The claims on appeal are claims 1-18.

IV. STATUS OF AMENDMENTS

Applicant did not file an Amendment After Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each independent claim involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. However, the citation to passages in the specification and drawings does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

According to one claimed embodiment of the present invention, such as that of independent claim 1, a method of managing communications associated with a plurality of wireless devices (e.g. pg. 7, lines 4 – 6; Fig. 4), comprising: detecting a first access point (e.g. pg. 7, lines 9 – 10; Fig. 4, 401); associating a station of a wireless switch with said first access point (e.g. pg. 7, lines 8 – 9; Fig. 4, item 400); routing data between said plurality of wireless devices and said first access point using said first station (e.g. pg. 7, lines 12 – 13; Fig. 4, 403); detecting a second access point (pg. 7, line 15; Fig. 4, 405); associating a second station of said wireless switch with said second access point (e.g. pg. 7, lines 16 – 17; Fig. 4, 406); monitoring signal strengths of said first and second access points as received by said first and second stations (e.g. pg. 7, lines 20 – 21; Fig. 4, 409); and switching to routing data between said plurality of wireless devices and said second access point using said second station in response to said monitoring (e.g. pg. 7, lines 21 – 23; Fig. 4, 410 & 411).

According to one claimed embodiment of the present invention, such as that of independent claim 9, a wireless switch system for managing communications of a plurality of wireless devices, comprising (e.g. pg. 5, lines 27 – 28; Fig. 3): an internal access point for managing a wireless local area network (WLAN) that includes said plurality of wireless devices (pg. 5, lines 15 – 16; Fig. 2, 202); a plurality of stations (e.g. pg. 5, lines 21 – 22; Fig. 2, 201-1,

201-2) for communicating with external access points; and a packet switch controller (e.g. pg. 5, lines 19 – 21, Fig. 2, 203) for routing data between said plurality of wireless devices and external access points using said plurality of stations(e.g. pg. 5, lines 19 – 21, Fig. 2, 203), wherein said packet switch controller is operable to switch communications between said plurality of stations in response to signal strengths received from said plurality of access points crossing threshold values (e.g. pg.. 5, lines 21 – 22; Fig. 2, 203).

According to one claimed embodiment of the present invention, such as that of independent claim 13, a wireless system, comprising: a plurality of access points (e.g. pg. 5, lines 28 – 29; Fig. 3, lines 103-1 & 103-2); and a wireless switch (e.g. pg. 5, lines 30 – 31; Fig. 3, 200) comprising: a plurality of stations (e.g. pg. 6, lines 2 & 8; Fig. 3, 201-1 & 201-2) for communicating with said plurality of access points (e.g. pg. 5, lines 15 – 16; Fig. 3, 202); an internal access point (Fig. 3, item 202) for managing communication with a plurality of wireless devices (e.g. pg. 6, lines 25 – 26; fig. 3, 102); and a packet switch controller (e.g. pg. 6 lines 13 – 15, Fig. 3, 203) for directing data between said plurality of stations and said plurality of wireless devices, wherein said packet switch controller switches between said plurality of stations in response to signal strengths received from said plurality of access points(e.g. pg. 6, lines 25 – 26; fig. 3, 102).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1, 2, 8, 9, 12, 13 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,867,785 (filed Jan. 31, 1996, issued Feb. 2, 1999) to Averbuch et al (hereinafter “Averbuch”) in view of U.S. Patent 6,243,575 (filed Aug. 25, 1998, issued Jun. 5, 2001) to Ohyama et al. (hereinafter “Ohyama”).
- B. Claims 4, 10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of Ohyama and further in view of U.S. Patent 5,268,933 (filed Sep. 27, 1991, issued Dec. 7, 1993) to Averbuch (hereinafter “Averbuch-2”).
- C. Claims 3 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of Ohyama and further in view of U.S. Patent Publication 2004/0058678 (filed Sep. 23, 2002, published Mar. 25, 2004) by deTorbal (hereinafter “deTorbal”).

- D. Claims 5, 6 and 14 – 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of Ohyama and further in view of U.S. Patent Publication 2003/0153316 (filed Feb. 12, 2002, published Aug. 14, 2003) by Noll et al. (hereinafter “Noll”).
- E. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Averbuch in view of Ohyama and further in view of U.S. Patent Publication 2002/0160773 (filed Mar. 28, 2002, published Oct. 31, 2002) by Gresham (hereinafter “Gresham”).

VII. ARGUMENT

The Examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. M.P.E.P. § 2142; *In re Peehs*, 612 F.2d 1287, 204 USPQ 835, 837 (CCPA 1980). In an obviousness rejection, “[u]nder § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.” *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 15 - 17 (1966). With regard to the claims rejected under 35 U.S.C. § 103(a) in the current application, the Office Action does not show that claims 1 – 18 are obvious under the framework set out in *Graham*. Specifically, the applied art does not teach all the limitations of the claims. Accordingly, Appellants traverse the rejections and requests that the Board reverse the rejections, at least, for the reasons discussed below.

- A. Rejection of claims 1, 2, 8, 9, 12, 13 and 18, under 35 U.S.C. § 103, as being unpatentable over Averbuch in view of Ohyama

Appellee has rejected claims 1, 2, 8, 9, 12, 13 and 18, under 35 U.S.C. § 103(a), as being unpatentable over Averbuch in view of Ohyama. Appellant submits that Appellee, has not properly ascertained the differences between the applied art and the rejected claims. Instead of ascertaining the differences between the applied art and the claims, Appellee has used hindsight reconstruction to piece together alleged teachings in the applied art in an attempt to render the claims obvious. “A fact finder should be aware . . . of the distortion caused by hindsight bias” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. ____ (2007) (citing *Graham*). “It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This

court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)).

In addition to using hindsight reconstruction, Appellee has not considered the claims as a whole. To properly ascertain the differences between the claims and the applied art, as required under *Graham*, the claimed invention must be considered “as a whole.” *Panduit Corp. v. Dennison Mfg. Co.*, 1 USPQ2d 1593, 1595 – 96 (Fed. Cir.), *cert. denied*, 481 U.S. 1052. Appellant discusses below, Appellee’s failure to properly ascertain the differences between the applied art and the claims.

1. The Independent Claims

- a. Claim 1

Claim 1 recites, “associating a station of a wireless switch with said first access point . . . routing data . . . using said first station . . . associating a second station . . . with said second access point . . . monitoring signal strengths . . . as received by said first and second stations . . . switching . . . using said second station . . .” Appellee cites Averbuch as the primary art teaching the limitations of claim 1. Significantly, Appellee concedes “Averbuch did not teach expressly first and second station of a wireless switch.” Office Action, page 3. Despite Appellee’s recognition that Averbuch does not teach a first and second station of a wireless switch, Appellee relies on Averbuch to teach a method requiring a first and second station. Further, each station set forth in the method is associated with a particular access point. Absent any teaching of a first and second station in Averbuch, Averbuch does not provide the necessary foundation for modification to meet claim 1.

Moreover, in seeking to address Averbuch’s conceded deficiencies, Appellee has pieced together isolated disclosures to deprecate the claimed invention. Specifically, Appellee relies on Ohyama (items *l* and *m* in Figure 4) as teaching the first and second station that are absent from

Averbuch. Appellee does not cure the deficiency of Averbuch by pointing to items *l* and *m* in Figure 4 of Ohyama. First, items *l* and *m* are control channels not stations of a wireless switch. *See* col. 5, lines 21 and 34.

Second, in relying on control channels *l* and *m* of Ohyama, Appellee has merely attempted to identify a first and second station of a device and has not considered the complete limitations of claim 1 or claim 1 as a whole. For example, Examiner has not shown that Ohyama teaches, “associating a second station . . . with said second access point” Instead, Examiner has merely asserted that Ohyama teaches a first and second station. Appellee’s assertion that Ohyama teaches a first and second station is insufficient to teach or suggest any of the steps of the method recited in claim 1 that involves the first and second stations.

In sum, Appellee has failed to establish a prima facie case of obviousness of claim 1 because Averbuch does not teach all the steps in claim 1 and Ohyama fails to cure the deficiencies of Averbuch. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 1.

b. Claim 9

Claim 9 requires, “A wireless switch system . . . comprising . . . a plurality of stations for communicating with external access points” Appellee concedes that “Averbuch did not teach expressly plurality of stations for communicating with external access points.” Office Action, page 5. Having conceded Averbuch does not teach a plurality of stations for communicating with external access points, Appellee relies on Ohyama (items *l* and *m* in Figure 4) as teaching this limitation of claim 1. The disclosure relating to items *l* and *m* of Ohyama, however, does not teach a plurality of stations for communicating with external access points. Items *l* and *m* are control channels. Col. 5, lines 21 and 34. Because items *l* and *m* are control channels and not stations, items *l* and *m* do not teach the limitation requiring a plurality of stations for communicating with external access points. Instead, items *l* and *m* teach that mobile base station 30 may use different control channels. A disclosure regarding the use of

different control channels for communicating between devices does not teach a plurality of stations for communicating with external access points.

Moreover, despite Appellee conceding that Averbuch does not teach a plurality of stations, Appellee nonetheless relies on Averbuch as teaching “a packet switch controller for routing data . . . using said plurality of stations, wherein said packet switch controller is operable to switch communications between said plurality of stations in response to signal strengths received from said plurality of access points crossing threshold values.” This anomaly where Appellee concedes Averbuch does not teach a plurality of stations and then asserts Averbuch teaches a packet switch controller that uses the plurality of stations illustrates that Appellee has not properly ascertained the differences between the applied art and claim 9. Instead of properly ascertaining the differences between the applied art and claim 9, Appellee has improperly pieced together isolated disclosures of the applied art in an attempt to render claim 9 obvious.

In sum, Appellee has failed to establish a *prima facie* case of obviousness of claim 9 because Averbuch does not teach all the limitations of claim 9 and Ohyama fails to cure the deficiencies of Averbuch. Accordingly, Appellant respectfully requests that the Board reverses the rejection, under 35 U.S.C. § 103, of claim 9.

c. Claim 13

Claim 13 requires “a wireless switch comprising . . . an internal access point for managing communication with a plurality of wireless devices” Appellee cites to Averbuch, items 202 – 205 of Figure 2, as teaching the internal access point of the wireless switch. Office Action, page 6. Appellee does not identify the disclosure in Averbuch that teaches a wireless switch. *See id.* Assuming, however, that Appellee relies on items 200 and 206 as teaching a wireless switch as was done with regard to claim 1, Appellee has not shown items 200 and 206 comprise items 202 – 205, the asserted access points. In fact, in Figure 2, items 202 – 205 are not depicted as a part of any of items 200 or 206. Instead, items 202 – 205 are deployed in different service coverage areas 215 – 218, (the different coaches of a train in Figure 2).

Consequently, Appellee has not shown the asserted wireless switch comprises internal access points.

Appellee concedes that “Averbuch did not teach expressly plurality of stations for communicating with external access points.” Office Action, page 6. Having conceded Averbuch does not teach a plurality of stations for communicating with external access points, Appellee relies on Ohyama (items *l* and *m* in Figure 4) as teaching this limitation of claim 1. The disclosure regarding items *l* and *m* of Ohyama, however, does not teach a plurality of stations for communicating with external access points. Items *l* and *m* are control channels. Col. 5, lines 21 and 34. Because items *l* and *m* are not stations, items *l* and *m* do not teach the limitation requiring a plurality of stations for communicating with external access points. Instead, items *l* and *m* teach that mobile base station 30 may use different control channels. A disclosure regarding the use of different control channels for communicating between devices does not teach a plurality of stations for communicating with the plurality of access points.

Moreover, despite Appellee conceding that Averbuch does not teach a plurality of stations, Appellee relies on Averbuch as teaching “a packet switch controller for directing data between said plurality of stations and said plurality of wireless devices, wherein said packet switch controller switches between said plurality of stations in response to signal strengths received from said plurality of access points.” Because Averbuch does not teach a plurality of stations, Averbuch cannot be read to teach a packet switch controller where the packet switch controller switches between the plurality of stations.

In sum, Appellee has failed to establish a prima facie case of obviousness of claim 13 because Averbuch does not teach all the limitations of claim 13 and Ohyama fails to cure the deficiencies of Averbuch. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 13.

2. The Dependent Claims

Claims 2 and 8 depend from claim 1. Claim 12 depends from claim 9. Claim 18 depends from claim 13. Each of the dependent claims inherit the limitations of its respective independent base claim. As discussed above, Appellee has not shown that the applied art teaches all the limitations of the independent claims. At least for this reason, the dependent claims 2, 8, 12 and 18 are each patentable over the applied art. Moreover, the dependent claims themselves recite limitations Appellee has not shown is taught in the applied art. These limitations are discussed below.

a. Claim 12

Claim 12 recites, “when said packet switch controller switches communications between a first station to a second station, said switch controller distributes remaining packets received by said first station to said plurality of wireless devices and send acknowledgement packets through said second station.” Appellee concedes Averbuch does not teach this limitation of claim 12 and relies on Ohyama, col. 5, lines 12 – 33; Figure 4; col. 13, lines 40 – 63, as teaching this limitation of claim 12. The cited portion of Ohyama, however, does not teach this limitation of claim 12.

Instead of teaching the limitations of claim 12, the cited portion of Ohyama teaches that if the mobile base station 30 is connected to the existing base station 10 through a control channel, even if the quality of the connection deteriorates, “[t]he mobile base station 30 maintains the call of the subscriber terminal 40 **until it completes**.” Col. 5, lines 20 – 25 (emphasis added). If there is a new call, after the deterioration of the connection with base station 10 is detected, the mobile base station 30 handles the new call with a base station having a stronger connection than station 10, using a different control channel.

In other words, the cited portion of Ohyama merely teaches that the mobile base station connects new calls using channels giving the best quality of service, at the time, irrespective of the channel used for previous calls. This teaching of Ohyama, therefore, is insufficient to teach the limitation of claim 12 requiring “when said packet switch controller switches communications between a first station to a second station, said switch controller distributes

remaining packets received by said first station to said plurality of wireless devices and send acknowledgement packets through said second station.”

In sum, Appellee has not shown that the applied art teaches all the limitations of claim 12. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103 of claim 12.

B. Rejection of claims 4, 10 and 17 as being unpatentable over Averbuch in view of Ohyama and further in view of Averbach-2

Claims 4, 10 and 17 each depend from claims that have been shown above to be patentable over the applied art. At least for this reason, the dependent claims 4, 10 and 17 are each patentable over the applied art. Moreover, claims 4, 10 and 17 themselves disclose limitations Appellee has not shown are taught by the applied art.

For example, claim 4 requires, “maintaining a connection with said second access point by communicating ping packets through said second access point.” Claim 10 requires, “wherein said packet switch controller maintains a connection with one of said plurality of access points by communicating ping packets through said one of said plurality of access points while data packets are communicated through another of said plurality of access points.” Claim 17 requires, “wherein said packet switch controller maintains a connection with one of said plurality of access points that is not currently used for data communications by routing ping packets through said one of said plurality of access points.” Appellee cites to Averbuch-2 as teaching these limitations of claim 4, 10 and 17.

The cited portion of Averbuch-2, however, merely teaches the accurate synchronization of data packets when two base stations transmit the same voice or control data at the same time by sending a dummy packet and monitoring base station arrival time. Thus, the dummy packet is merely used for testing arrival times for synchronizing. Using dummy packets for synchronizing does not teach the limitation of claim 4 requiring, “maintaining a connection with said second access point by communicating ping packets through said second access point.” Similarly, the

limitations of claims 10 and 17 are not taught by Averbuch-2. Thus, Appellee has not shown that the applied art teaches all the limitations of claims 4, 10 and 17. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claims 4, 10 and 17.

C. Rejection of claims 3 and 11 as being unpatentable over Averbuch in view of Ohyama and further in view of deTorbal

Claim 3 depends from claim 1 and inherits the limitations of claim 1. Claim 11 depends from claim 9 and inherit the limitations of claims 9. As discussed above, Appellee has not shown that the applied art teaches all the limitations of independent claims 1 and 9. At least for this reason, the dependent claims 3 and 11 are each patentable over the applied art. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claims 3 and 11.

D. Claims 5, 6 and 14 – 16 rejected as being unpatentable over Averbuch in view of Ohyama and further in view of Noll.

Claims 5, 6 and 14 – 16 each depend from claims that have been shown above to be patentable over the applied art. At least for this reason, the dependent claims 5, 6 and 14 – 16 are each patentable over the applied art. Moreover, claims 5, 6 and 14 – 16 themselves disclose limitations Appellee has not shown are taught by the applied art. These limitations are considered below.

a. Claim 5

Claim 5 recites, “operating a base station associated with said first access point by tracking movement of said plurality of wireless devices and said wireless switch using a directional antenna.” Appellee concedes that “[n]either Averbuch nor Ohyama teaches a base station associated with a first access point with a directional antenna.” Office Action, page 9. Appellee, therefore, relies on Noll for teaching the conceded deficiency of Averbuch and Ohyama. Appellee, however, has merely cited and asserted that a portion of Noll teaches a base

station with an antenna. By citing that devices recited in a step of a method claim, exist in the applied art is insufficient to show that the applied art teach the step in question. “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. ____ (2007). Thus, Appellee’s reliance on Noll for the step at issue, namely “operating a base station associated with said first access point by tracking movement of said plurality of wireless devices and said wireless switch using a directional antenna,” is insufficient to meet the requirements of a proper obviousness rejection under *KSR*. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 5.

b. Claim 6

Claim 6 recites, “monitoring received signal strengths associated with respective patterns of antenna elements of said directional antenna; and switching between said patterns in response to monitoring received signal strengths associated with the respective patterns.” Appellee concedes, Averbuch in view of Ohyama does not teach this limitation of claim 6. Office Action, page 9. Appellee, relies on Noll as teaching these limitations missing from Averbuch and Ohyana.

Appellee’s citation to Noll, however, is directed to selecting of antenna elements for use by a base station in communicating with repeater stations and the adjustment of the phase or amplitude of RF signals received and transmitted by the antenna elements. Paragraph [0018], lines 1 – 15. In fact, Noll is generally directed to isolating communications that may interfere with each other. *See* Abstract (stating, “[t]he system selectively configures the first smart antenna system to spatially isolate communications on the first RF backhaul from communications on a second RF backhaul of a second repeater.”). Thus, Appellee has not shown that Noll teaches “monitoring received signal strengths associated with respective patterns of antenna elements of said directional antenna; and switching between said patterns in response to monitoring received signal strengths associated with the respective patterns,” as required in

claim 6. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 6.

c. Claim 14

Claim 14, recites, “wherein one of said plurality of access points comprises a base station with a directional antenna, said base station comprising a controller that tracks movement of said wireless switch using said directional antenna through a coverage area of said one of said plurality of access points.” Appellee concedes that Averbuch and Ohyama does not teach all the limitations of claim 14. Appellee then relies on Noll for teaching the deficiencies of Averbuch and Ohyama. In relying on Noll, however, Appellee has not considered claim 14 as a whole and has merely picked from Noll a teaching of a base station with an antenna. Appellant submits that Appellee’s picking and choosing isolated disclosures from Averbuch, Ohyama and Noll without reference to claim 14, as a whole, does not render claim 14 obvious.

To illustrate further, Appellants note that Noll is generally directed to isolating communications that may interfere with each other. *See* Abstract (stating, “[t]he system selectively configures the first smart antenna system to spatially isolate communications on the first RF backhaul from communications on a second RF backhaul of a second repeater.”). Thus, Noll does not teach at least the limitations of claim 14 requiring “a controller that tracks movement of said wireless switch using said directional antenna through a coverage area of said one of said plurality of access points.” Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 14.

d. Claims 15 and 16

Appellee asserts that Noll, paragraph [0018], lines 1 – 15 teach the limitation of claims 15 and 16 requiring “monitoring signal strengths received from said wireless switch by a plurality of patterns of discrete antenna elements of said directional antenna.” There is no such teaching, however, in the cited portion of Noll. Rather, the cited portion of Noll teaches selecting of antenna elements for use by a base station in communicating with repeater stations

and the adjustment of the phase or amplitude of RF signals received and transmitted by the antenna elements.

Moreover, as discussed above, Noll is directed to isolating communications that may interfere with each other. Appellee, therefore, has not shown that Noll teaches or suggest the limitations of claims 15 and 16 requiring “wherein said controller of said base station monitors signal strengths received from said wireless switch by a plurality of patterns of discrete antenna elements of said directional antenna.” Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claims 15 and 16.

2. Rejection of claim 7 rejected as being unpatentable over Averbuch in view of Ohyama and further in view of Greshman.

Claim 7 depends from claim 1. Claim 1 has been shown above to be patentable over the applied art. At least for this reason, dependent claim 7 is patentable over the applied art. Moreover, claim 7 itself discloses limitations Appellee has not shown are taught by the applied art. For example, Appellee states that “Averbuch in view of Ohyana teaches all the particulars of the claim except wherein the packets from the first access point that are associated with transmission control protocol (TCP) sessions.” Office Action, page 11. Appellee relies on Gresham for the limitations Appellee concedes are missing from Averbuch and Ohyama.

The cited portions of Gresham, however, do not teach the limitations of claim 7 at issue. Rather, the portion of Gresham on which Appellee relies teaches TCP/IP traffic between a remote computer terminal and a server. The server and computer are insufficient to teach first and second access points and first and second stations as described in claim 7. Therefore, Appellee has not shown switching that comprises “receiving packets from the first access point that are associated with transmission control protocol (TCP) sessions; and sending acknowledgement packets in response to said receiving using said second station” as required in claim 7. Accordingly, Appellant respectfully requests that the Board reverse the rejection, under 35 U.S.C. § 103, of claim 7.

VIII. CLAIMS APPENDIX

A copy of the claims involved in the present appeal is attached hereto as Claims Appendix.

IX. EVIDENCE APPENDIX

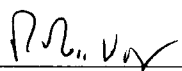
An Evidence Appendix is attached. However, the Evidence Appendix does not contain any evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner.

X. RELATED PROCEEDINGS APPENDIX

A Related Proceedings Appendix is attached. However, the Related Proceedings Appendix does not contain any related proceedings.

Dated: March 14, 2008

Respectfully submitted,

By 

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CLAIMS APPENDIX

1. A method of managing communications associated with a plurality of wireless devices, comprising:
 - detecting a first access point;
 - associating a station of a wireless switch with said first access point;
 - routing data between said plurality of wireless devices and said first access point using said first station;
 - detecting a second access point;
 - associating a second station of said wireless switch with said second access point;
 - monitoring signal strengths of said first and second access points as received by said first and second stations; and
 - switching to routing data between said plurality of wireless devices and said second access point using said second station in response to said monitoring.
2. The method of claim 1 further comprising: associating said plurality of wireless devices with an access point of a wireless switch.
3. The method of claim 1 wherein said monitoring comprises: applying a filtering function to received signal strengths.
4. The method of claim 1 further comprising:
 - maintaining a connection with said second access point by communicating ping packets through said second access point.
5. The method of claim 1 wherein said plurality of wireless devices and said wireless switch are moving in a common direction, the method further comprising:
 - operating a base station associated with said first access point by tracking movement of said plurality of wireless devices and said wireless switch using a directional antenna.

6. The method of claim 5 further comprising:
monitoring received signal strengths associated with respective patterns of antenna elements of said directional antenna; and
switching between said patterns in response to monitoring received signal strengths associated with the respective patterns.
7. The method of claim 1 wherein said switching comprises:
receiving packets from the first access point that are associated with transmission control protocol (TCP) sessions; and
sending acknowledgement packets in response to said receiving using said second station.
8. The method of claim 1 wherein said wireless switch is disposed within a transportation vehicle.
9. A wireless switch system for managing communications of a plurality of wireless devices, comprising:
an internal access point for managing a wireless local area network (WLAN) that includes said plurality of wireless devices;
a plurality of stations for communicating with external access points; and
a packet switch controller for routing data between said plurality of wireless devices and external access points using said plurality of stations, wherein said packet switch controller is operable to switch communications between said plurality of stations in response to signal strengths received from said plurality of access points crossing threshold values.
10. The wireless switch system of claim 9 wherein said packet switch controller maintains a connection with one of said plurality of access points by communicating ping packets through said one of said plurality of access points while data packets are communicated through another of said plurality of access points.
11. The wireless switch system of claim 9 wherein said packet switch controller applies a filtering function to received signal strengths.

12. The wireless switch system of claim 9 wherein when said packet switch controller switches communications between a first station to a second station, said switch controller distributes remaining packets received by said first station to said plurality of wireless devices and send acknowledgement packets through said second station.

13. A wireless system, comprising:
a plurality of access points; and
a wireless switch comprising:
a plurality of stations for communicating with said plurality of access points;
an internal access point for managing communication with a plurality of wireless devices; and
a packet switch controller for directing data between said plurality of stations and said plurality of wireless devices, wherein said packet switch controller switches between said plurality of stations in response to signal strengths received from said plurality of access points.

14. The wireless system of claim 13 wherein one of said plurality of access points comprises a base station with a directional antenna, said base station comprising a controller that tracks movement of said wireless switch using said directional antenna through a coverage area of said one of said plurality of access points.

15. The wireless system of claim 14 wherein said controller of said base station monitors signal strengths received from said wireless switch by a plurality of patterns of discrete antenna elements of said directional antenna.

16. The wireless system of claim 15 wherein said controller of said base station switches between said plurality of patterns in response to said monitoring.

17. The wireless system of claim 13 wherein said packet switch controller maintains a connection with one of said plurality of access points that is not currently used for data communications by routing ping packets through said one of said plurality of access points.

18. The wireless system of claim 13 wherein said wireless switch is mounted to a transportation vehicle.

EVIDENCE APPENDIX

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

RELATED PROCEEDINGS APPENDIX

No related proceedings are referenced in II. above, hence there are no copies of decisions in related proceedings to be provided.